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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,502

03/23/2004

Marian Rudolf

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2766

24374 7590 05/22/2008

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EXAMINER

PEREZ, JULIO R

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

05/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/806,502	RUDOLF ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JULIO R. PEREZ	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/23/07</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/08 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 19, 21, 22, 24, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha et al. (2004/0090934) in view Valkealahti et al. (US 20050107106A1).

Regarding claims 19, 22, Cha discloses providing high speed downlink packet access (HSDPA) services (par. 15, lines 1-13), the method comprising: transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated timeslots during a predetermined time period (par. 19; par. 25, lines 5-13, provides measurements and a status signal transmitted from the base station to indicate utilization of resources).

What Cha does not explicitly disclose is receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level, wherein the HSDPA transmit power level of each allocated timeslot is not allowed to exceed a maximum allowed HSDPA transmit power level indicated for the allocated timeslot.

Valkealahti discloses setting maximum transmission power limit for the HS-DSCH of a cell, wherein the total power of the downlink shared channel can be determined by scaling the power of the downlink shared channel DSCH for that associated dedicated channel, thus, adequate power control means that power control

steps and power control dynamic variations due to fast fading are taken into account (Pars. 009, 002).

It would have obvious to one of skilled in the art at the time of the invention to modify Cha, such that receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level, wherein the HSDPA transmit power level of each allocated timeslot is not allowed to exceed a maximum allowed HSDPA transmit power level indicated for the allocated timeslot, in order to obtain accuracy in power control configuration and provide efficiency in transmission within the combination system.

Regarding claims 21, 24, the combination discloses claim 19 wherein the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services (Cha, par. 27).

6. Claims 25, 27, 29, 30, 32, 34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha and Valkealahti in view of Malkamaki (US 20040097253A1) and Wiberg et al. (US 20030210660).

Regarding claims 25, 30, Cha discloses providing high speed downlink packet access (HSDPA) services, the method comprising: receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level (pars. 27-29, the transmit power distribution of the base station's transmit power is determined for the services offered); and transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated power during a predetermined time period (pars. 27-29. Note further that par. 29, lines 4, teaches the

base station sending a corresponding signal to station controller, corresponding to the monitored demand for the dedicated voice channels and HSDPA services).

What Cha does not specifically disclose is that the method in the multi-cell communication system is established within a frequency division duplex cell having sets of transmission timing intervals. However, Malkamaki teaches these limitations (pars. 39, 41, 61, 67, 71).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Cha to include Malkamaki, as it is known to implement wireless communication systems with FDD mode and TTIs to define periods for data transportation between the user equipment and base stations.

Cha in view of Malkamaki does not explicitly disclose a signal indicating different maximum allowed transmit power values for different timeslots.

Wiberg teaches power control transmission using total power allocated for all channels (par. 12, lines 11-17; par. 21; par. 40, lines 11-21; par. 41).

It would have been obvious to one skilled in the art at the time of the invention to modify Cha and Malkamaki, such that providing the maximum amount of power to timeslot on the cell, to provide proper allocation for optimal performance of the channel and avoid wasting resources.

Regarding claims 27, 32, the combination discloses claim 25 wherein at least one set of the allocated TTIs are included in a frequency division duplex (FDD) cell frame (Malkamaki, pars. 61, 67, 71).

Regarding claims 29, 34, the combination discloses claim 25 wherein the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services (Cha, par. 27).

7. Claims 35, 37, 38, 40, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha et al. (2004/0090934) in view Valkealahti et al. (US 20050107106A1).

Regarding claims 35, 38, Cha discloses providing high speed downlink packet access services, the method comprising: transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated timeslots during a predetermined time period (par. 19; par. 25, lines 5-13, provides measurements and a status signal transmitted from the base station to indicate utilization of resources).

What Cha does not explicitly disclose is receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level, wherein the HSDPA transmit power level of each allocated timeslot is not allowed to exceed a maximum allowed HSDPA transmit power level indicated for the allocated timeslot.

Valkealahti discloses setting maximum transmission power limit for the HS-DSCH of a cell, wherein the total power of the downlink shared channel can be determinedly scaling the power of the downlink shared channel DSCH for that associated dedicated channel, thus, adequate power control means that power control steps and power control dynamic variations due to fast fading are taken into account (Pars. 009, 002).

It would have obvious to one of skilled in the art at the time of the invention to modify Cha, such that receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level, wherein the HSDPA transmit power level of each allocated timeslot is not allowed to exceed a maximum allowed HSDPA transmit power level indicated for the allocated timeslot, in order to obtain accuracy in power control configuration and provide efficiency in transmission within the combination system.

Regarding claims 37, 40, the combination discloses claim 35 wherein the control signal limits the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services (Cha, par. 27).

8. Claims 41, 43, 45, 46, 48, 50, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha and Valkealahti in view of Malkamaki (US 20040097253A1) and Wiberg et al. (US 20030210660).

Regarding claims 41, 46, Cha discloses providing high speed downlink packet access (HSDPA) services, the method comprising: receiving at least one control signal indicating at least one maximum allowed HSDPA transmit power level (pars. 27-29, the transmit power distribution of the base station's transmit power is determined for the services offered); and transmitting at least one feedback signal indicating the results of measurements of the power of at least one of the allocated power during a predetermined time period (pars. 27-29. Note further that par. 29, lines 4, teaches the base station sending a corresponding signal to station controller, corresponding to the monitored demand for the dedicated voice channels and HSDPA services).



What Cha does not specifically disclose is that the method in the multi-cell communication system is established within a frequency division duplex cell having sets of transmission timing intervals. However, Malkamaki teaches these limitations (pars. 39, 41, 61, 67, 71).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Cha to include Malkamaki, as it is known to implement wireless communication systems with FDD mode and TTIs to define periods for data transportation between the user equipment and base stations.

With further regard to claim 14, Cha discloses a RNC and a plurality of base stations in communications with the RNC (Figure 1, #'s 20a-20c, 22a-22b).

Cha in view of Malkamaki does not explicitly disclose a signal indicating different maximum allowed transmit power values for different timeslots.

Wiberg teaches power control transmission using total power allocated for all channels (par. 12, lines 11-17; par. 21; par. 40, lines 11-21; par. 41).

It would have been obvious to one skilled in the art at the time of the invention to modify Cha and Malkamaki, such that providing the maximum amount of power to timeslot on the cell, to provide proper allocation for optimal performance of the channel and avoid wasting resources.

Regarding claims 43, 48, the combination discloses claim 41 wherein at least one set of the allocated TTIs are included in a frequency division duplex (FDD) cell frame ((Malkamaki, pars. 61, 67, 71).

Regarding claims 45, 50, the combination discloses claim 41 wherein the control signal limits

the allowed HSDPA transmit power level to ensure that there is sufficient power reserved for non-HSDPA services (Cha, par. 27).

9. Claims 20, 23, 26, 31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha and Valkealahti in view of Wang et al. (US 20050117553A1).

Regarding claims 20, 23, 26, 31, the combination of Cha and Wiberg teaches claim 1, but it is silent on wherein the predetermined time period is at least 100 ms.

Wang teaches "TDMA frame having a duration of 10 ms per timeslot and, which subdivided into fifteen time slots", that includes at least 10 slots (i.e., 10x10 ms), (par. 42, lines 17-20), which reads on a predetermined time period of at least 100 ms.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Cha to include Wang, as it is known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

10. Claims 28, 33, 44, 49, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha and Valkealahti in view of Mousley et al. (US 20050083977A1).

Regarding claims 28, 33, 44, 49, the combination discloses claim 27, but wherein the FDD cell frame has a length of 10 ms and each TTI has a length of 2 ms<sup>1</sup>.

Mousley teaches allocation of channels with TTI of length 2 ms and frames of length of 2 ms (pars. 27, 37).

It would have been obvious to one of ordinary skill in the art to modify Cha to include Mousley, as it is known in the art that TTIs conform to 2 ms and frames with lengths of 10 ms, to identify the frame lengths for transmission.

11. Claims 36, 39, 42, 47, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cha and Valkealahti in view of Wang et al. (US 20050117553A1).

Regarding claims 36, 39, 42, 47, the combination discloses claim 35, but wherein the predetermined time period is at least 100 ms.

Wang teaches "TDMA frame having a duration of 10 ms per timeslot and, which subdivided into fifteen time slots", that includes at least 10 slots (i.e., 10x10 ms), (par. 42, lines 17-20), which reads on a predetermined time period of at least 100 ms.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Cha to include Wang, as it is known to implement wireless communication systems with time periods during provision of timeslots for data transportation.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIO R. PEREZ whose telephone number is (571)272-7846. The examiner can normally be reached on 10:30 - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Julio R Perez/  
Examiner, Art Unit 2617

5/21/08

/Duc Nguyen/  
Supervisory Patent Examiner, Art Unit 2617